



Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

November 6, 2015

Medline Industries, Inc.  
Matt Clausen  
Sr. Regulatory Affairs Specialist  
One Medline Place  
Mundelein, IL 60060

Re: K143693  
Trade/Device Name: Medline Sharps Containers  
Regulation Number: 21 CFR 880.5570  
Regulation Name: Hypodermic Single Lumen Needle  
Regulatory Class: Class II  
Product Code: MMK  
Dated: November 2, 2015  
Received: November 5, 2015

Dear Mr. Clausen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

*Tejashri Purohit-Sheth, M.D.*

Tejashri Purohit-Sheth, M.D.  
Clinical Deputy Director  
DAGRID/ODE/CDRH FOR

Erin I. Keith, M.S.  
Director  
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Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
K143693

Device Name  
Medline Sharps Containers

### Indications for Use (Describe)

Medline Sharps Containers are intended to provide a receptacle for used, contaminated medical sharps and act as an enclosure during transport to ultimate disposal.

| Medline Model No. | Capacity   | Lid Configuration | Dimensions of Lid Opening (aperture) | Weight of Finished Good (lbs) | Dimensions of Finished Good (L x W x H) | Color |
|-------------------|------------|-------------------|--------------------------------------|-------------------------------|---|-------|
| MDS701201         | 1 GALLON   | Sliding           | 5.5" x 2.25"                         | 0.681                         | 6.88"x 10.06"x 4.5"                     | Red   |
| MDS701201F**      | 1 GALLON   | Counter-Balanced  | 8.75" x 1.75"                        | 0.752                         | 6.88"x 10.06"x 6.25"                    | Red   |
| MDS705201         | 1 GALLON   | Sliding           | 5.5" x 2.25"                         | 0.676                         | 6.88"x 10.06"x 4.5"                     | Red   |
| MDS705201F**      | 1 GALLON   | Counter-Balanced  | 8.75" x 1.75"                        | 0.747                         | 6.88"x 10.06"x 6.25"                    | Red   |
| MDS701202         | 2 GALLONS  | Sliding           | 5.5" x 2.25"                         | 1.014                         | 6.88"x 10.06"x 9.5"                     | Red   |
| MDS701202F**      | 2 GALLONS  | Counter-Balanced  | 8.75" x 1.75"                        | 1.085                         | 6.88"x 10.06"x 11.25"                   | Red   |
| MDS705202         | 2 GALLONS  | Sliding           | 5.5" x 2.25"                         | 1.002                         | 6.88"x 10.06"x 9.5"                     | Red   |
| MDS705202F**      | 2 GALLONS  | Counter-Balanced  | 8.75" x 1.75"                        | 1.073                         | 6.88"x 10.06"x 11.25"                   | Red   |
| MDS705208HN       | 8 GALLONS  | Hinged            | 16.5" x 5.75"                        | 2.491                         | 12.5"x 18.25"x 11"                      | Red   |
| MDS705208SL       | 8 GALLONS  | Sliding           | 9" x 8.5"                            | 2.884                         | 12.5"x 18.25"x 11.5"                    | Red   |
| MDS705208ST       | 8 GALLONS  | Star              | 1.75" x 1.75"                        | 2.551                         | 12.5"x 18.25"x 12.38"                   | Red   |
| MDS705210HN       | 10 GALLONS | Hinged            | 16.5" x 5.75"                        | 2.813                         | 12.5"x 18.25"x 14"                      | Red   |
| MDS705210SL       | 10 GALLONS | Sliding           | 9" x 8.5"                            | 3.206                         | 12.5"x 18.25"x 14.5"                    | Red   |
| MDS705210ST       | 10 GALLONS | Star              | 1.75" x 1.75"                        | 2.873                         | 12.5"x 18.25"x 15.38"                   | Red   |
| MDS705212HN       | 12 GALLONS | Hinged            | 16.5" x 5.75"                        | 3.311                         | 12.5"x 18.25"x 17"                      | Red   |
| MDS705212SL       | 12 GALLONS | Sliding           | 9" x 8.5"                            | 3.704                         | 12.5"x 18.25"x 17.5"                    | Red   |
| MDS705212ST       | 12 GALLONS | Star              | 1.75" x 1.75"                        | 3.371                         | 12.5"x 18.25"x 18.38"                   | Red   |
| MDS705218HN       | 18 GALLONS | Hinged            | 16.5" x 5.75"                        | 4.269                         | 12.5"x 18.25"x 28"                      | Red   |
| MDS705218SL       | 18 GALLONS | Sliding           | 9" x 8.5"                            | 4.662                         | 12.5"x 18.25"x 28.5"                    | Red   |
| MDS705218ST       | 18 GALLONS | Star              | 1.75" x 1.75"                        | 4.329                         | 12.5"x 18.25"x 29.38"                   | Red   |

\* Intended for areas with no unsupervised patient access for the container models that do not have features to prevent hand and finger access to the sharps waste.

\*\* Intended for use with mounting accessories.

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Type of Use (Select one or both, as applicable)

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Prescription Use (Part 21 CFR 801 Subpart D)

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Over-The-Counter Use (21 CFR 801 Subpart C)

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**CONTINUE ON A SEPARATE PAGE IF NEEDED.**

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**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

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## **510(k) Summary (as required per 21 CFR 807.92)**

### **Summary Preparation Date**

November 6, 2015

### **Submitter / 510(k) Sponsor**

Medline Industries, Inc.  
One Medline Place  
Mundelein, IL 60060

### **Contact Person**

Matt Clausen  
Sr. Regulatory Affairs specialist  
Phone: 847-643-4785  
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### **Device Name / Classification**

Device Name: Medline Sharps Containers  
Proprietary Name: Medline Sharps Containers  
Common Name: Sharps Container  
Classification Name: Hypodermic single lumen needle (21 CFR 880.5570, product code – MMK, Class II)

### **Predicate Device**

Medline Sharps Container, K132767

### *Comparison of Subject and Predicates*

| <b>Characteristic</b> | <b>Proposed Device</b>  | <b>Predicate Device</b>   | <b>Comparison</b> |
|-----------------------|---|---|-------------------|
| 510(k)                | K143693   | K132767   | n/a               |
| Product Code          | MMK   | M   | Same              |
| Regulation No.        | 21 CFR 880.5570   | 21 CFR 880.5570   | Same              |
| Class                 | II  | II  | Same              |
| Indications For Use   | Medline Sharps Containers are intended to provide a receptacle for used, contaminated medical sharps and act as an enclosure during transport to ultimate disposal. | Medline Sharps Containers are intended to provide a receptacle for used, contaminated medical sharps and act as an enclosure during transport to ultimate disposal. | Same              |



|  |  |  |                     |
|--|--|--|---------------------|
| Size   | 1G / 2G / 8G / 10G / 12G / 18G   | 1Qt / 5Qt  | Sizes are different |
| Dimensions (mm)  | 177 x 259 x 123 /<br>177 x 259 x 265 /<br>322 x 470 x 332 /<br>322 x 470 x 409 /<br>322 x 470 x 489 /<br>322 x 470 x 765 | 95 x 95 x 153 /<br>265 x 113 x 233                                     | Different           |
| Weight range (grams)   | 303 - 2388   | 107 - 360  | Different           |
| No. of Pieces  | 2-3  | 2-3  | Same                |
| Material   | Poly-propylene   | Poly-propylene   | Same                |
| Base Color   | Red  | Re   | Same                |
| Clarity  | Opaque/translucent   | Opaque/translucent   | Same                |
| Method of Manufacture  | Injection Molded   | Injection Molded   | Same                |
| Performance testing (puncture, impact, drop, stability, integrity) | Pass   | Pass   | Same                |
| Technical characteristics  | Refer to statement in Summary of Technological Characteristics section   | Refer to statement in Summary of Technological Characteristics section | Same                |
| Lid configurations / aperture dimensions                           | Refer to table below in Indication For Use section   | Container capacities are different; dimensions are different           | Different           |
| Accessories  | Mounting accessories (brackets) are available for use with 1g and 2g containers in locking and non-locking variations.   | None   | Different           |

## Device Description

Medline Sharps Containers are two-piece conventional, disposable sharps containers. The base container and its lid are made of puncture resistant, leak proof polypropylene. These containers are offered in various volumes, sizes, and lid styles. Mounting accessories (brackets) are available for use with 1g and 2g containers in locking and non-locking variations. The device is intended to be used by qualified personnel in health care facilities and other facilities in which medical sharps may be used. The device is not in contact with or available to the patient in normal use.

## Indications for Use



Medline Sharps Containers are intended to provide a receptacle for used, contaminated medical sharps and act as an enclosure during transport to ultimate disposal.

| Medline Model No.    | Capacity | Lid Configuration | Dimensions of Lid Opening (aperture) | Weight of Finished Good (lbs) | Dimensions of Finished Good (L x W x H) | Color |
|----------------------|----------|-------------------|--------------------------------------|-------------------------------|---|-------|
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\* Intended for areas with no unsupervised patient access for the container models that do not have features to prevent hand and finger access to the sharps waste.

\*\* Intended for use with mounting accessories.

### Summary of Technological Characteristics

The subject device and predicate device differ in container dimensions; sharps aperture features; use of mounting accessories and container capacities. The differences in design are intended to address specific site and user needs. Any risks resulting from design differences from the predicate device have been adequately mitigated with the performance testing, site-of-use labeling, and use with appropriate mounting accessories. The differences in technological characteristics do not impair the subject device models from their intended functions of disposal and storage of sharps waste.



## Summary of Non-Clinical Testing

The safety and effectiveness of the Medline Sharps Containers are adequately supported by the substantial equivalence information, materials information, and Design Control activities referenced within this Premarket Notification.

## Summary of Performance Testing

| Test Objective                          | Testing Standards | Performance Results   |
|---|-------------------|---|
| Container Stability                     | BS EN ISO 23907   | Meets ISO 23907 Requirements - Specimens were placed on a surface with an inclination of 15° in the most adverse position for toppling with no more than 0 failures per container.  |
| Handle Strength                         | BS EN ISO 23907   | Meets ISO 23907 Requirements - The sharps containers were filled to 50% of the fill line with de-ionized water and were then suspended by the handles for a period of at least 60 minutes; no failures were observed.   |
| Puncture Resistance                     | ASTM F 2132       | Meets ASTM F 2132 Requirements - Container was secured to the test apparatus using a specimen support plate with a 6mm diameter hole. The inside surface of the container was facing towards and perpendicular to the 21 gauge, 1 inch long needle. The needle was lowered vertically towards the test specimen at a rate of 100 mm/min, and was allowed to penetrate the test specimen; the puncture force was recorded. Per the acceptance criteria the average force was required to be greater 3.4 lbf (15 N), and no single value from any region was allowed to be below 2.8 lbf. |
| Resistance to Damage (Drop/Impact Test) | BS EN ISO 23907   | Meets ISO 23907 Requirements – Drop tested at height of 1m per test standard. Testing resulted in no evidence of leakage or damage resulting in a breach of the sharps containment area. As such, all Medline products were found to meet the acceptance criteria for resistance to damage from a vertical drop. Additional 1m drop testing was conducted using subject containers with a 40 lb. load or capacity load (23 lbs. for smaller   |





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**K143693**

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|  |  | sharps container), intended to simulate OSHA safe lifting limits. Five containers were used for each test orientation for each tested model. The test allowed only a single failure per test condition. The containers passed this test. |
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### **Summary of Clinical Testing**

Not applicable.

### **Conclusion**

Medline Industries, Inc. concludes that the Medline Sharps Containers are substantially equivalent to the predicate device [Medline Sharps Container (K132767)] as described herein.